

**CONTRIBUTION (A) TO THE
STUDY OF THE THERAPEUTICS
OF**

PULMONARY TUBERCULOSIS

AND ITS TREATMENT.

by Willard H. Morse ✓

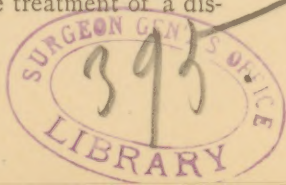
See p. 10.



A CONTRIBUTION TO THE STUDY OF
THE THERAPEUTICS OF PUL-
MONARY TUBERCULOSIS.

[From the *American Practitioner and News*, Louisville,
Ky., Oct. 29th, 1887.]

Viewing tuberculosis as an infectious disease dependent upon the absorption and culture of the bacillus tuberculosis, it is a matter of interest and importance to discuss the measures which are at our hand to govern the extension of the propagation concerned; a work than which there is none more in the true spirit of the healing art or more consonant with the principles of the most elevated philanthropy. Volumes have been written and more than volumes have been spoken on the general subject of the treatment of a dis-



ease, notable not alone because of its frequency, but as well for its destructiveness to life, its often absolute hopelessness and the dark shadows which lie upon life here and there from its baneful touching of the territory of mind. Remedies have been brought forward, and one by one have found to be failures — our hands full of them, and yet tuberculosis patients die under our care by the legion.

It would be unprofitable to undertake a review of the therapeutic measures which have been and are employed under the guidance of varied pathological views. The busy practitioner has no time to read such matter, and the ultra theorist has no heart to venture hypotheses where the expressions of ideas form a subject of such practical, nay vital importance. We can, however, justify ourselves in reasoning by induction and in consideration of facts and measures of the worthiest type. There are remedial measures which are the superior of others, and which, proved by the different

phases of a many-phased disease, have not been without influence. If such measures are applied, and if to each phase there is a remedial application, reason might teach that by a judicious combination of these we may hope to be nearer to successful treatment than is made possible otherwise. At least it cannot be an ill-timed work to discuss the principal agents in treatment with brevity and with a view to a rational combination.

Such agents are auxiliary to all such others as fall under the head of hygiene, and relate to diet, change of climate, open-air exercise, clothing, and mental encouragement, and are in addition to that further management which has to do with alcoholic stimulants and the different tonic remedies, expectorants, and palliative measures for certain complications. We may not concern ourselves with other than these direct measures for the prevention of the propagation of the bacillus, of which the chief are four, namely, cod-liver oil, the hypophosphites, medicated gaseous enemata,

and the parenchymatous injection of the biphosphate of lime.

With the two first-named measures we enjoy the acquaintance of years, with the others that of months alone. Cod-liver oil came first into general notice in 1841, the hypophosphites in 1858, and the measures most modern in 1886 and 1887. We honor successively Bennett, Churchill, Bergeon, and Kolischer.

The demand is for healthy pulmonary tissues of such a character as to resist in a measure the encroachments of the bacillus, and for the repair of the tissues which have suffered such encroachments.

Let us see if this demand is not gratified by the agencies considered.

1. The hypophosphites provide to the tissues the element of phosphorus, the bacillus declining attack upon tissues where this element is normally present or officially supplied.

2. Cod-liver oil, in consequence of some resi-

dent peculiar principle or principles, produces or preserves healthy tissues, but only as adjunct to the hypophosphites.

3. Gaseous enemata control suppuration and give the lesions an opportunity to undergo cicatrization.

4. The parenchymatous injection of the salt of lime causes calcification and cicatrization of the lesions.

In fine our methods are but two, prophylactic and curative. Our objects are simply three, to produce healthy tissues, to control suppuration, and to promote cicatrization.

Strictly speaking, the four measures combine in one. Cod-liver oil does not manifest its conservative influence where phosphorus is absent from the tissues, and as this element is most frequently wanting it is patent that we do no violence in putting the hypophosphites at the head of therapeutic measures. Moreover, the injection of the biphosphate of lime is to serve the

same purpose as the use of the hypophosphites, and is justly adjuvant to the use of that measure. The outcome is a recognition of the fact that the hypophosphites lead in treatment, and an unquestioning acceptance of the theory of Churchill, modified of course so as to read, "The bacillus tuberculosis shuns the tissues where phosphorus abounds." Though hygienic measures be invariably indicated and cod-liver oil be not infrequently required, the hypophosphite is the remedial factor that stands at the head.

I am not unaware of the unpopularity of the hypophosphites in some quarters. But there is a good reason for this. We forget that the world has moved since the days of Churchill. He combined the hypophosphites of calcium, sodium, iron, potassium, and ammonium; and those who put aside the consideration of antagonisms and use this combination are necessarily disappointed. Again, those who consider that there is any considerable value in the hypophosphites of potas-

sium, iron, and ammonium, find disappointment, and to such an extent that it is safe to say that those who condemn the measure have only had experience with the syrups and other compositions having these as principal elements. Practically it is the hypophosphites of lime and soda that are alone of value, and it is the syrup of these two hypophosphites as prepared according to the most approved formula, since only by using legitimate and chemically pure preparations can success be attained. Some of the so-called hypophosphites in the market are not true to name, are manifestly impure, and are not only without affinity for oxygen but adulterated as well. The non-success of those who condemn the agent is due to the use of these impure preparations, and the success of those who praise the agent is due to the use of the syrup of the two potential salts indicated.

It is not necessary to refer to the inutility or inertness of three of the five salts which Churchill

commended, now that we study them in the light of our knowledge of the propagation of the bacillus tuberculosis. On the other hand it is hardly necessary to give any reasons for the faith in the calcium and sodium salts, which faith we cherish.

There is procured a rational deoxidation, and there is given the three-fold influence of phosphorus, lime, and sodium. There may be noticed a hindrance of the retrograde metamorphosis of tissue, a promotion of assimilation and nutrition, a neutralization of any free acids, an oxidation of the albuminous elements of the blood, and certain other physiological actions not material to the treatment under consideration. Finally the vitalizing constituent, phosphorus, is secured to the tissues, other nutrition being provided assuredly by cod-liver oil when required. It will be apparent that, in the prophylaxis of pulmonary tuberculosis and in the earlier stages of the disease, tissue may be produced which shall contain sufficient phosphorus to repel the bacillus by the use

of the salts referred to, and the auxiliary oil if necessary. But what have we to write of the later stages of the malady? Dr. John Dixwell says, "Even in the third stage of phthisis an evident prolonging of life is recorded." Professor Lynch, of Baltimore, says that although his expectation of benefit is lessened in the later stages, he finds improvement and lengthening of life. My own opinion is such that I expect much even in the stages where there are cavities. I would continue the treatment without an interrupted day, but — And here come in our third and fourth facts. Though the continuance of the treatment is not to be questioned, we have to consider that, in addition to providing healthy tissue, we have to control suppuration and promote cicatrization.

Without entering into any lengthy consideration of the treatment devised by Dr. Bergeon, of Lyons, let me say emphatically that it has my strongest faith. Its beneficial effects on the septic

and suppurative surfaces are excellent, the consumption proper, the exhaustion, being due to the suppuration and consequent septicemia. At another time I may report my success with this treatment, but at this time it is but necessary to say that it fulfills the theory.

Of Kolischer's method of supplying the tubercular foci with the salts of lime so as to calcify the tubercles and effect a cicatricial shrinking of the nodules, it is enough to say that the theory is perfect and that the promises are good.

In conclusion, I look for no remedy of future discovery, but relying on early diagnosis, tonics, stimulants, and care of complications, I place confidence in the proved measures which produce healthy tissues, control suppuration, and promote cicatrization. Be the stage of the disease early or late, we can fulfil the indications by these as by no other methods.

WILLARD H. MORSE, M.D.

Westfield, N. J.

The attention of the Medical Profession is invited to the following letters from Dr. Lynch of Baltimore, and Dr. Dixwell of Boston, which are worthy of a careful reading :

BALTIMORE, Aug. 12, 1880.


DR. J. A. MCARTHUR, Lynn, Mass.,

Dear Sir:—Some years ago I gave the Hypophosphites a trial in consumption, but finding in them (as I thought) no advantage over iron, quinine, cod-liver oil, whiskey, etc., I abandoned their use. Upon reading your little pamphlet entitled “Consumption and Tuberculosis,” it occurs to me that I may have been too hasty in my conclusion, or the preparations I used were impure, and I would now like to give them

another trial. I am Professor of Principles and Practices and Clinical Professor of Diseases of the Heart, Throat and Lungs, in the College of Physicians and Surgeons, and at the City (Charity) Hospital. At this last institution I see quite a large number of consumptives every year, and have excellent opportunities for testing the value of remedies in this disease. It is true that the cases met with in hospitals are not the most favorable ones for testing remedies, because many of them are already too far gone to be permanently relieved by any treatment. Still, it must be admitted that it is in hospitals alone that exact results can be reached, and valuable, because reliable, statistics can be obtained as to the comparative value of remedies or plans of treatment.

In my teaching heretofore (I have held this chair for seven years), I have either entirely ignored the Hypophosphites in consumption and tuberculosis, or passed them by simply with an unfavorable notice. Now I do not desire to be

guilty of "false teaching," nor do I wish to induce my pupils to withhold from any human creature, and especially from one so forlorn as a victim of tuberculosis is, anything which yields the slightest hope of benefit to him. I therefore write to ask if you are willing to place at my disposal, to be used in the City Hospital, what you may consider a sufficient quantity of your Syrup of Hypophosphites of Lime and Soda to enable me to give it a fair trial. I ask this because, first: I attach little value to reports from private practice, but a great deal to hospital reports by experts. I have seen too many patients suffering from simple chronic bronchitis, or bronchiectasis or asthma, who had been pronounced by private physicians to be suffering from advanced phthisis, and on the other hand, persons unmistakably tuberculous, or suffering from other forms of consumption, pronounced free from any destructive form of pulmonary disease, not to feel a great deal of doubt about the accuracy of the diagnosis of many



reported cases of consumption cures — doubts which rendered such reports in my opinion absolutely worthless; and, secondly, my hospital is too poor at present to expend money on costly medicines, which have in my opinion only a doubtful value. For these reasons I have asked you to furnish the hospital — gratuitously — with a sufficient quantity of your syrup to give it a fair trial. I promise you it shall have such fair trial in cases suitable for its use (not hopeless ones); and if I find it has any superiority over the other ordinary remedies for consumption, we shall order large quantities of it, and I shall also not only use it in my private practice but teach its use also in my public lectures. My class numbered 336 last winter, and will be somewhat larger this year. Hoping to hear from you at your earliest convenience, I am,

Yours truly,

JNO. S. LYNCH, M. D.

BALTIMORE, Aug. 23, 1880.

DR. J. A. McARTHUR, 31 S. Common St., Lynn,
Mass.,

My Dear Doctor:—Your kind answer to my former letter is received and I beg to return you warmest thanks for your kindness in placing at my disposal a quantity of your Syrup of Hypophosphites for trial in the City Hospital, and also for the kind terms in which you extend me this favor.

I wish to assure you again that my object is to give to a remedy which, under perhaps unfavorable or faulty conditions, I had formerly tried and found wanting, a fairer trial under circumstances more exact and favorable for correct observation. I shall try it fairly and faithfully and let you know the result.

Send me such a quantity as your own judgment may deem sufficient for my purpose, by express, directed to Dr. Jno. S. Lynch, City Hospital, Calvert and Saratoga Sts., Baltimore, Md., ex-

press charges C. O. D. With many thanks,
I am,

Very truly yours,

JNO. S. LYNCH.

BALTIMORE, March 22, 1881.

DR. J. A. McARTHUR,

My Dear Doctor : — I take this occasion to say that I used the Syrup of Hypophosphites you were kind enough to furnish me for trial in suitable cases in the City Hospital, both in the in- and out-patients' departments, and in all cases with very decided benefit. In every case emaciation was arrested, and in some there was a decided gain of flesh and strength, with a corresponding improvement in the cough and other symptoms.

I now prescribe it habitually in my private practice, and *always with benefit* when the cases are properly selected. Of course when patients come to me with cavities already formed, and other

points ready to soften and break down, in a state of extreme emaciation, and suffering from pronounced hectic, I do not prescribe your syrup with any expectation of permanent benefit. But even in these cases I think the patient's condition is improved, waste is retarded, and *life thus prolonged.*

I am your most obliged and obedient servant,

JOHN S. LYNCH, M. D.,

*Prof. Principles and Practices of Medicine and Clinical
Professor of Heart, Throat and Lungs, in College of
Physicians and Surgeons.*

BALTIMORE, April 26, 1881.

DR. J. A. MCARTHUR,

Dear Doctor: — You are at liberty to use my letter in any way that will contribute to your pleasure or profit. There are so many nearly worthless proprietary medicines of this kind on the market (and every day is adding to their num-

ber) that when one is found to be really valuable I think it the duty of the profession to make it known.

JOHN S. LYNCH.

BOSTON, May 21, 1879.

DOCTOR MCARTHUR,

My Dear Doctor:—After having given your Syrup of Pure Hypophosphites a fair trial in some dozen typical cases of pulmonary trouble in widely differing subjects and in various stages of advance in disease, I feel prepared to express an opinion of some possible value as to the action of this preparation.

I have noticed *distinct curative powers* in the *first* and *second* stages of phthisis, male and female adult, and in first stages of children over twelve years of age. In some female cases noticed an increase in the menses, apparently as thus caused. Even in the *third* stage of phthisis, in three cases of adults, an evident prolonging of life by supply

of this nutritive element was recorded. Hence I want to add my voice to others in favoring the use of your preparation when symptoms demonstrate the need of a powerful, easily assimilated element of this sort.

Very truly, etc.,

JOHN DIXWELL, M. D.,

*General Agent Massachusetts Society for the Prevention of
Cruelty to Children.*

BOSTON, MASS., Aug. 29, 1880.

MY DEAR DOCTOR:—Let me say that your Hypophosphites have done more for three little broken-down children who have come under our care of late, more than we ever expected from our use of the preparation before. We do not want better results.

JOHN DIXWELL, M. D.

BOSTON, March 1st, 1888.

DEAR DOCTOR :

Our Hypophosphites have already received the endorsement of the medical profession as being the best known remedy in pulmonary and other wasting diseases.

If you have not already done so, we trust you will give them a full and fair trial in your practice, fully believing you will find them more satisfactory than any remedy you have hitherto used in the treatment of Tuberculosis.

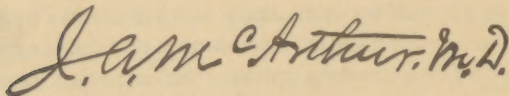
We cannot guarantee the genuineness of our Hypophosphites except when purchased in original bottles. Then, if desired, the trade label may be removed and prescription directions substituted in its place.

As it is made only for physicians there are no printed wrappers or advertisements about the bottle.

We are not unmindful of our obligations to the profession who have so generously given us their support, and do hereby tender them our grateful acknowledgments.

McARTHUR HYPOPHOSPHITE CO,

30 Hanover Street.

A large, elegant handwritten signature in cursive script that reads "J. A. McArthur, M.D.".

McARTHUR'S SYRUP HYPOPHOSPHITES COMP: C. P.

IS KEPT IN STOCK BY THE WHOLESALE DRUGGISTS THROUGHOUT
THE UNITED STATES,

To whom all orders for less than gross lots should be sent.

POTTER DRUG & CHEMICAL CO., General Agents,
BOSTON, MASS.



Size lately increased from 8 to
12 ounces, by measure.

